

14. An electroporation chamber for poration of biological particles, comprising:  
walls defining a fluid flow path;  
electrodes disposed along sides of the fluid flow path, the electrodes being in  
electrical communication with a source of electrical energy, whereby  
biological particles moving along the fluid flow path are subjected to an  
electrical field; and  
the apparatus being characterized by at least one of the walls defining the fluid  
flow path being elastically deformable and at least another one of the walls  
defining the fluid flow path being substantially rigid.

15. The electroporation chamber of Claim 14, wherein the electrical energy is  
pulsed.

16. The electroporation chamber of Claim 14, wherein the electrical energy is a  
variable flux.

17. The electroporation chamber of Claim 14, wherein the at least one of the walls  
defining the fluid flow path being comprised of a deformable, elastic  
material comprises two of the walls being comprised of a deformable,  
elastic material

18. The electroporation chamber of Claim 14, wherein the electrodes comprise  
continuous band electrodes.

19. The electroporation chamber of Claim 14, wherein the electrodes further  
function as a cooling device.

SUB B27

Sub C1)

SVB B3

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SUB B3  
a pump for moving the biological particles along the fluid flow path; and  
a controller responsive to the rate at which the pump moves the biological particles along the fluid flow path and to the interval between pulses of electrical energy.

A2  
SUB C1)  
23. The electroporation chamber of Claim 22, wherein the controller regulates the rate at which the pump moves the biological particles along the fluid flow path.

24. The electroporation chamber of Claim 22, wherein the controller regulates the interval between pulses of electrical energy.

SUB B4  
25. An electroporation chamber for poration of biological particles, comprising:  
walls defining a fluid flow path;  
electrodes disposed along sides of the fluid flow path, the electrodes being in electrical communication with a source of electrical energy, whereby biological particles moving along the fluid flow path are subjected to an electrical field.

26. The electroporation chamber of Claim 25, wherein the electrical energy is pulsed.

27. The electroporation chamber of Claim 25, wherein the electrical energy is a variable flux.

28. The electroporation chamber of Claim 25, wherein the electrodes comprise